## INSTHE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION OF

F. Abel Ponce de Leon et al.

Group Art Unit: 1633

Application Serial No. 09/500,635

Examiner: M. Wilson

Filed: February 9, 2000

Title: PROLONGED CULTURING OF AVIAN (CHICKEN) PRIMORDIAL GERM CELLS (PGCs) USING

SEPCIFIC GROWTH FACTORS, USE THEREOF TO PRODUCE CHIMERIC AVIANS (CHICKENS)

## **AMENDMENT AND REPLY TO OFFICE ACTION**

Hon. Commissioner of Patents Washington, DC 20231

Sir:

This amendment is responsive to the Office Action dated August 16, 2001. Entry and reconsideration of the claimed subject matter is respectfully requested.

## IN THE CLAIMS:

Kindly cancel claims 1-20 without prejudice.

Please introduce the following claims:

21. A culturing method which provides for the production of avian Primavril gum cells (PGCs) and embryonic germ (EG) cells comprising the following steps:

- (i) isolating primordial germ cells (PGCs) from a desired avian;
- (ii) culturing said PGCs in a complete culture medium containing essentially the following growth factors in amounts sufficient to maintain said PGCs for prolonged periods in tissue culture:
  - (1) leukemia inhibitory factor (LIF),
  - (2) basic fibroblast growth factor (bFGF),
  - (3) stem cell/factor (SCF) and
  - (4) insulin like growth factor (IGF),

for a time period sufficient to produce a culture having a compact multilayer like appearance whereby said culturing is performed in the absence of a feeder layer, wherein said culture comprises a mixture of PGCs and EG cells.